#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002465 Address: 333 Burma Road **Date Inspected:** 23-Apr-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 1400 **Project Name:** SAS Superstructure **OSM Departure Time:** 2330 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No N/A **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG/Tower

### **Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Erik Prue was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

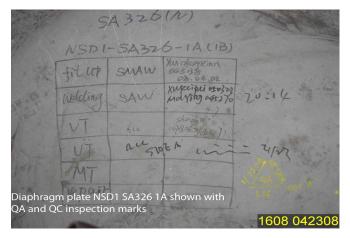
Bay 4 & 8: QA Inspector performed ultrasonic verification testing of the tower diaphragm plate Complete Joint Penetration (CJP) butt joint after ZPMC QC UT acceptance. Plates QA Inspector UT tested are NAD1 SA276 1B and 2B side "B", WSD1 SA316 1A and 6A side "A", NSD1 SA326 1A side "A", and SSD1 SA277 1A side "A". QA Ultrasonic Testing (UT) was performed to verify that a minimum of 10% of the weld meets the requirements of the contract documents and AWS D1.5-2002. The weld and base metal were scanned utilizing a Krautkramer Branson USN 60 #01RN5T. QA Inspector performed a base metal lamination check using a 25mm diameter 2.25 MHz transducer and a shear wave scan using a 20mm x 15mm 2.25 MHz transducer on a 70 and 45 degree angle wedges from face A. For details please see the ultrasonic testing report TL-6027 dated April 23, 2008. QA Inspector found the welds inspected to be in compliance with AWS D1.5- 2002 Table 6.3 and the contract documents.

Bay 7- QA Inspector performed ultrasonic (UT) verification testing of Floor Beam Sub Assembly Complete Joint Penetration (CJP) welds at joints FB010-005-023, FB015-010-023, FB015-014-023, FB009-009-021, FB015-013-023, FB010-004-023, FB015-007-026, and FB015-012-026 after ZPMC QC acceptable UT inspection. The Ultrasonic Testing (UT) was performed to verify that 10% of the weld meets the requirements of the contract documents and AWS D1.5-2002. The weld and base metal were scanned utilizing a Krautkramer Branson USN 60 #01RN5T. QA Inspector performed a base metal lamination check using a 25mm diameter 2.25 MHz

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

transducer and a shear wave scan using a 20mm x 15mm 2.25 MHz transducer on a 70 degree angle wedge from face A. For details please see the ultrasonic testing report TL-6027 dated April 23, 2008. QA Inspector found the welds inspected to be in compliance with AWS D1.5- 2002 Table 6.3 and the contract documents.



### **Summary of Conversations:**

No significant conversations this day.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry, 858 344-2712, who represents the Office of Structural Materials for your project.

Inspected By:	Prue,Erik	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer